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(71)Applicant : NEC CORP

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(72)Inventor : SUZUKI SHIGEYOSHI
ISHII TOSHIYA
MURAI HIDEYA
MATSUYAMA HIROAKI
KOBAYASHI KAZUMI
HIRAI YOSHIHIKO

(54) LIQUID CRYSTAL DISPLAY DEVICE, MANUFACTURE AND DRIVING METHOD THEREOF

(57)Abstract:

PROBLEM TO BE SOLVED: To make a liquid crystal display device fast respondent and excellent in a visual angle.

SOLUTION: In a liquid crystal display device wherein a liquid crystal layer is held between two sheets of substrates 23, 33, and the liquid crystal layer takes bent- deformation from one substrate over the other and two or more sorts of minute areas coexist in the liquid crystal layer, in order to provide a liquid crystal display which has a fast response speed and is excellent in a visual angle, the liquid crystal display device is to be so arranged that at least one substrate 23 has an electrode 22 having an opening part thereon and a second electrode 25 is provided at the position of the opening part 24 for controlling initial orientation of the liquid crystal. In this case, an optical correction plate can be mounted between the substrate and a polarizing plate. Moreover, on this liquid crystal display device, it is possible to control and drive the initial orientation of the liquid crystal by impressing a voltage across a 2nd electrode and its counter electrode and generating a diagonal electric field. A voltage is impressed across the 2nd electrode and the counter electrode to generate the diagonal electric field for controlling the initial alignment, and a liquid crystal display device storing this alignment by polymerizing a small amount of monomer or oligomer mixed with the liquid crystal is manufactured.

